

LETTERS TO THE EDITOR

Prevalence of HPV cervical infections among imprisoned women in Barcelona, Spain

EDITOR,—The penitentiary centres in Spain harbour inmates in whom the combination of HIV infection, history of injecting drug use, and prostitution is common.¹ Extensive protocols to detect sexually transmitted diseases and tuberculosis are implemented in these centres; however, human papillomavirus (HPV) infections and related lesions are not routinely searched for. Although Spain is characterised by a very low incidence of cervical cancer,² a high rate of cervical cancer has been reported recently among the AIDS female population in Catalonia.³ We carried out a study aiming to characterise HPV cervical infection and related cervical lesions among women with many potential risk factors for cervical neoplasia. The study was done in the only institution in Barcelona where women are imprisoned. The population consisted of 157 women attending the medical office of the prison between February and December 1996 and represented 90% of all women staying in prison for more than 3 days. Women who agreed to participate underwent a gynaecological examination, collection of cervical cells, a structured interview by a trained nurse, determination of HIV, hepatitis B and C serostatus, and detection of HPV DNA in the cervical cells by means of PCR. L1 consensus primers MY09/MY11 were used with modifications as described by Hildesheim *et al.*⁴

HPV DNA was detected in 48% of the women. The prevalence of cervical abnormalities was 29.9%; 19 women had a atypical squamous cells of undetermined significance (ASCUS) and 28 women were diagnosed with squamous intraepithelial lesion (SIL), five of whom had a high grade lesion. All women with a SIL and 42% of those with a ASCUS were HPV positive. Prostitution was reported by 38.2% and injecting drug use by 64.3% women. HIV infection was detected in 56.1%. HPV detection was significantly related to HIV, to injecting drug use, to pros-

titution practices, and to hepatitis C positive serology. After adjusting for these variables, HPV detection remained significantly associated with HIV and with length of time injecting drugs (table 1). No association between HPV detection was found with other reproductive and sexual characteristics. In addition, HIV positive women had an increased risk to develop SIL compared with HIV negative women (POR=5.02, 95% CI=1.69–14.89). As previously reported, the risk for SIL increased with low CD4 T cell counts, although POR did not reach statistical significance.⁵

Data from an ongoing study in a nearby area indicate that the prevalence of cervical abnormalities in the general population is around 4% (manuscript in preparation). This is the first time that we have documented in Spain a group of women with a very high rate of HPV infection linked to injecting drug use and with a rate of pre-neoplastic cervical lesions about seven times higher than that observed in the general population.

While in prison these women were appropriately treated for HIV infection and for SIL. When out of prison or in jail, a gynaecological screening every 6–12 months should be organised and recommended.

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Table 1 Age adjusted prevalence odds ratios for human papillomavirus infection (HPV DNA) in the cervical cells by different characteristics

	HPV DNA Negative		HPV DNA positive		PORc	PORa	95% CI
	No	%	No	%			
HIV							
Negative	54	63.5	15	20.8	1	1	
Positive	31	36.5	57	79.2	7.3	4.7	1.96–11.4
Prostitution							
No	59	69.4	38	52.8	1	1	
Yes	26	30.6	34	47.2	2.0	1.2	0.5–2.5
Injecting drug use							
No	44	51.8	12	16.7	1	1	
Yes	41	48.2	60	83.3	5.4	2.4	0.98–6.1
Length of use:							
0–9 years	22	26.5	26	36.6	4.2	2.2	0.8–6.0
≥10 years	17	20.5	33	46.5	7.0	2.9	1.0–8.2
Hepatitis C							
Negative	49	59.8	21	31.3	1	1	
Positive	33	40.2	46	68.7	3.1	1.2	0.5–2.9

PORc = age adjusted.

PORa = adjusted for age and the other variables in the table.

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Detection of penicillinase producing *Neisseria gonorrhoeae* strains in Cuba, 1995–8

EDITOR,— Since the 1940s, penicillin has been recommended for the treatment of gonorrhoea. In the 1950s the first strains of *Neisseria gonorrhoeae* with reduced susceptibility to this antibiotic, as a result of chromosomal mutations, were isolated, and in 1976 the first penicillinase producing *Neisseria gonorrhoeae* (PPNG) strains emerged in South East Asia and Africa, causing high level resistance to penicillin (MIC 16 µg/ml).¹ In Cuba, the first report of a PPNG strain was made in 1986 (C Almanza, personal communication). We report here on the proportion of PPNG strains received at the Neisseria Reference Laboratory, Tropical Medicine Institute “Pedro Kouri” (IPK), Cuba between January 1995 and December 1998.

In all, 110 strains of *N gonorrhoeae* isolated from 10 of the 14 Cuban provinces were examined for their β lactamase activity by the chromogenic method (Nitrocefin, Oxoid). These strains were transported to the IPK using a novel transport and conservation medium for gonococci developed at our laboratory.² *N gonorrhoeae* WHO E and WHO A were used as positive and negative control strains, respectively. All strains were identified as gonococci by standard procedures.³

Table 1 shows the distribution of Cuban PPNG and non-PPNG strains detected in our laboratory during 1995–8. The PPNG strains predominated totally (61/110, 55.5%). The percentage of PPNG strains was high in all years analysed.⁴ To our knowledge it is the first study developed in Cuba, analysing the β lactamase activity of *N gonorrhoeae* isolated from different provinces in which a high percentage of PPNG strains was found. Previous studies developed in specific Cuban hospitals in Havana City have revealed a lower percentage of PPNG strains (M Berroa *et al.*, 1988; C Almanza *et al.*, 1988, personal communications).

Penicillin has been the drug of choice for treatment of gonococcal infections in Cuba since 1972.⁵ The results of this study indicate that any policy to treat such infections should not include penicillin or other similar drugs. Other antimicrobials recommended by the World Health Organisation for treatment gonorrhoea—for example, spectinomycin, cephalosporins, quinolones, and azithromycin